What is claimed is:

1. A cordless telephone on Frequency Hopping Spread Spectrum (FHSS) system comprising:

a handset unit;

a base unit including a main controller of said base unit, a storing unit of said base unit, and a communication unit of said base unit communicating with said handset unit; wherein

said handset unit

i) measures field strength on a channel for use in communication, and

ii) when communicating condition of the channel is determined to be bad based on a result of the measurement, grades the channel as an inferior channel and notifies the base unit of the value of the field strength together with the channel number, and

said base unit

i) stores the channel number and the field strength in said storing unit of said base unit, and,

ii) when the number of the inferior channels has become not less than a predetermined number and when notified by said handset unit of information about a further inferior channel, compares field strength of the inferior channel with the field strength value of the stored inferior channel, determines the channel of better communicating condition as the channel to be used, and sends said handset unit a notice to switch the channel for use in communication to the channel to be used.

2. The cordless telephone according to claim 1, wherein

said handset unit includes:

a) a channel selecting unit for selecting the channel;

b) a field strength measuring unit for measuring the field strength on the selected channel;

c) a determining unit of said handset unit for determining whether the selected channel is the inferior channel;

d) a notifying unit of said handset unit for notifying said base unit of the field strength together with the inferior channel number through a communication unit of said handset unit; and

e) a channel exchanging unit for exchanging the inferior channel for the channel of better communicating condition responsive to an exchanging request from said base unit; and

said base unit includes:

f) an inferior channel number counting unit for counting the number of the inferior channels;

g) a determining unit of said base unit for determining whether the number of the counted inferior channels is not less than the predetermined number and determining, when the number of the calculated inferior channels has become greater than the predetermined number inclusive due to the further inferior channel, whether the further inferior channel should be exchanged for the inferior channel stored in said storing unit;

h) a notifying unit of said base unit for sending said handset unit, when said determining unit determines that the exchanging should be made, a request for performing the exchange through said communication unit; and

i) a channel exchanging unit for performing the exchange.

3. The cordless telephone according to claim 1, wherein

said handset unit, before entering into a state of making conversation, notifies said base unit of information about the inferior channel, while said base unit sends said handset unit a notice to switch the channel for use in communication to the channel to be used

and in the state of making conversation,

said handset unit determines communication error condition of a selected channel and, when communication error condition of a selected channel is determined to be bad, notifies said base unit of the selected channel number and error information indicating communication error condition thereof being bad, and performs channel exchanging responsive to a request from said base unit for exchanging channels, and

said base unit: i) stores information including the inferior channel number and the value of the field strength, as well as the error information, in said storing unit of said base unit as inferior channel information and ii) selects, when the number of the inferior channels becomes not less than said predetermined number, the channel the field strength value thereof is the lowest of the channels graded as inferior channels before entering into the state of making conversation, as a good channel, and sends said handset a notification that the good channel should be used.

4. The cordless telephone according to claim 3, wherein

said handset unit includes:

a) a radio communication circuit of said handset unit for transmitting and receiving a radio-frequency signal;

b) a channel selecting unit for sequentially selecting conversation channels;

c) a communication error determining unit for determining communication error condition of a selected conversation channel;

d) a notifying unit for notifying, when said communication error determining unit determines that the communication error condition is bad, the base unit of the error information through said radio communication circuit of said handset unit; and

e) a channel exchanging unit for exchanging the conversation channels responsive to the request from the base unit, and

said base unit includes:

f) a storing unit of said base unit for storing data;

g) a radio communication circuit of said base unit for transmitting and receiving a radio-frequency signal;

h) a determining unit for determining whether there is notification of the error information from said handset unit and determining, when it is determined that the notification of the error information is received, whether the number of the inferior channels is greater than the predetermined number inclusive;

i) a storing unit, when the number of the inferior channels is determined to be below the predetermined number, for allowing the conversation channel specified in the error information to be stored in said storing unit of said base unit as the inferior channel;

j) an inferior channel number counting unit, when the number of the inferior channels is determined to be below the predetermined number, for incrementing the number of inferior channels by one;

k) a channel selecting unit, when the number of the inferior channels is determined to be not less than the predetermined number,

for selecting the good channel;

l) a notifying unit for sending a request to said handset unit through said radio communication circuit of said base unit for exchanging the conversation channel specified in the error information for the good channel; and

m) a channel exchanging unit for exchanging the conversation channel specified in the error information for the good channel.

5. A cordless telephone on Frequency Hopping Spread Spectrum (FHSS) system comprising:

a handset unit; and

a base unit communicating with said handset unit, wherein,

in a channel setting stage preceding a conversation stage, notification of information about a channel, communicating condition thereof is determined to be bad by said handset unit based on field strength, is given to said base unit, and said base unit sends said handset unit a notice that switching should be made to the channel to be used, and

in the conversation stage,

said handset unit determines communication error condition of a channel selected from the channels determined to be used in the channel setting stage, and

said base unit, based on communication error condition determined by said handset unit, selects the channel, field strength thereof is the smallest of the channels graded as inferior channels in the channel setting stage, as a new channel to be used and sends said handset unit a notice that switching should be made to the new channel to be used.

6. The cordless telephone according to claim 3, wherein

the communication error condition is determined to be: i) bad when Cyclic Redundancy Error Rate (CRCE) is not less than a predetermined error rate; and ii) good when the CRCE is below the predetermined error rate.

7. The cordless telephone according to claim 4, wherein

the communication error condition is determined to be: i) bad when Cyclic Redundancy Error Rate (CRCE) is not less than a predetermined error rate inclusive; and ii) good when the CRCE is below the predetermined error rate.

8. The cordless telephone according to claim 5, wherein

the communication error condition is determined to be: i) bad when Cyclic Redundancy Error Rate (CRCE) is not less than a predetermined error rate; and ii) good when the CRCE is below the predetermined error rate.

9. A method of channel setting for setting channels of good communicating condition in a cordless telephone on FHSS system including a handset unit and a base unit comprising the steps of:

a) setting the channels of good communicating condition in said handset unit; and

b) setting the channels of good communicating condition in said base unit; wherein

said step a) includes the steps of:

a-1) selecting a channel as an object of determination;

a-2) measuring field strength on the selected channel;

a-3) determining whether the selected channel should be graded as inferior channel based on the field strength;

a-4) notifying said base unit of the measured field strength together with channel number of the determined inferior channel; and

a-5) exchanging the inferior channel for a good channel responsive to a request for exchanging from said base unit; and

said step b) includes the steps of:

b-1) storing the inferior channel number and the field strength;

b-2) counting number of the inferior channels;

b-3) determining whether the counted number of the inferior channels is greater than a predetermined number inclusive;

b-4) determining, when the counted number of the inferior channels is determined to be not less than the predetermined number, whether a further inferior channel should be exchanged for an inferior channel of the stored channels;

b-5) sending, when the exchanging is determined to be made in said step b-4), a request to said handset unit for perfuming the exchange; and

b-6) performing, when the exchanging for the inferior channel is determined to be made in said step b-4), the exchange.

10. The method of channel setting according to claim 9, wherein said step a) further includes the steps of:

a-6) sequentially selecting channels for conversation;

a-7) determining whether good or bad communication error condition of the selected channel for conversation is;

a-8) grading a channel as the inferior channel when communication error condition thereof is determined to be bad in said step a-7) and notifying said base unit of the channel number of the selected channel for conversation and error information indicating that communication error condition thereof is bad; and

a-9) performing exchanging of channels in compliance with a request from said base unit; and

said step b) further includes the steps of:

b-7) determining whether notification of the error information is arrived;

b-8) determining, upon receipt of the notification of the error information, whether the number of the inferior channels exceed the predetermined number;

b-9) storing, when the number of the inferior channel is determined to be smaller than the predetermined number, the channel for conversation specified in the error information as the inferior channel;

b-10) incrementing the number of inferior channels by 1 when the number of the inferior channels is determined to be smaller than the predetermined number;

b-11) selecting, when the number of the inferior channels is determined to be not less than the predetermined number, a channel field strength level thereof is the lowest of the inferior channels stored in said step b-1), as a new good channel;

b-12) sending the handset unit a request for exchanging

the channel specified in the error information for the new good channel; and

b-13) exchanging the channel for conversation specified in the error information for the new good channel.

11. A method, in a cordless telephone on FHSS system including a handset unit and a base unit, of channel setting for carrying on a conversation over a channel of good communication error condition comprising the steps of:

a) discriminating, before the conversation is started, channels of good communicating condition and channels of bad communicating condition;

b) selecting further, at the handset unit, channels for conversation from the good channels; and

c) selecting further, at the base unit, channels for conversation from the good channels; wherein

said step b) includes the steps of:

b-1) sequentially selecting channels for conversation;

b-2) determining whether good or bad communication error condition of the selected channels for conversation is;

b-3) grading a channel as an inferior channel when the communication error condition thereof is determined to be bad in said step b-2), and notifying said base unit of the channel number of the selected channel for conversation and error information indicating that the communication error condition thereof is bad; and

b-4) making channel exchanging responsive to a request from said base unit; and

said step c) includes the steps of:

c-1) determining whether notification of the error information is received;

c-2) determining, upon receipt of the error information, whether the number of the inferior channels exceed a predetermined number;

c-3) storing, when the number of inferior channels is determined to be smaller than the predetermined number, the channel for conversation specified in the error information as the inferior channel;

c-4) incrementing, when the number of inferior channels is determined to be smaller than the predetermined number, the number of inferior channels by one;

c-5) selecting, when the number of the inferior channels is determined to be not less than the predetermined number, a channel electric field strength thereof is the smallest of the channels graded as inferior channels in step a), as a new good channel;

c-6) sending said handset unit a request for exchanging the channel for conversation specified in the error information for the new good channel; and

c-7) exchanging the channel for conversation specified in the error information for the new good channel.

12. The method of channel setting according to claim 10, wherein the communication error condition is determined to be: i) bad when Cyclic Redundancy Error Rate (CRCE) is not less than a predetermined error rate; and ii) good when the CRCE is below the predetermined error rate.

13. The method of channel setting according to claim 11, wherein the communication error condition is determined to be: i) bad when Cyclic Redundancy Error Rate (CRCE) is not less than a predetermined error rate; and ii) good when the CRCE is below the predetermined error rate.